



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/369,424	08/06/1999	TORU FUJITA	Q55331	6768

7590 01/09/2004

SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER

BRINICH, STEPHEN M

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 01/09/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office**

Address : COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER

ART UNIT	PAPER
----------	-------

13

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Office Action Summary

Application No.

09/369,424

Applicant(s)

FUJITA, TORU

Examiner

Stephen M Brinich

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,10-15 and 19-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-43 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,10,12,13,19 and 23-34 is/are rejected.
- 7) ☒ Claim(s) 2,5,6,11,14,15 and 20-22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

Art Unit: 2624

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 10, & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike in view of Kuwata et al. or Satou et al.

Re claims 1, 10, & 19, Koike discloses (column 13, lines 6-21) an image processing arrangement in which a tone correction specific to the gamma characteristic of an output device is applied to an image signal. After this correction, the signal is subject to halftone processing to generate halftone data.

Further re claims 1, 10, & 19, as noted in Applicant's arguments (Paper #12: page 18 - page 19, line 7), Koike does not teach or suggest the newly recited element of tone correction with respect to *rewritten* tone correction data.

Kuwata et al. (column 20, lines 3-10) or Satou et al. (column 11, line 49 - column 12, line 6) each discloses the correction of color tone with respect to rewritten calibration data. The use of such rewriting to update the tone correction data (inherently requiring the storage of this information in a rewritable data storage) of Koike for the purpose of improving the accuracy of this data in light of user experience or new

Art Unit: 2624

tone measurements would be an expedient obvious to one of ordinary skill in the art.

3. Claims 1, 10, 19, 23, 25-27, 29-31, & 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakawa in view of Kuwata et al. or Satou et al.

Re claims 1, 10, & 19, Yamakawa discloses (column 4, lines 28-34) an image processing arrangement in which a tone correction specific to the gamma characteristic of an output device is applied to an image signal. After this correction, the signal is subject to halftone processing to generate halftone data.

Further re claims 1, 10, & 19, as noted in Applicant's arguments (Paper #12: page 18 - page 19, line 7), Yamakawa does not teach or suggest the newly recited element of tone correction with respect to *rewritten* tone correction data.

Kuwata et al. (column 20, lines 3-10) or Satou et al. (column 11, line 49 - column 12, line 6) each discloses the correction of color tone with respect to *rewritten* calibration data. The use of such rewriting to update the tone correction data (inherently requiring the storage of this information in a rewritable data storage) of Yamakawa for the purpose of improving the accuracy of this data in light of user experience

Art Unit: 2624

or new tone measurements would be an expedient obvious to one of ordinary skill in the art.

Re claims 23, 25-27, 29-31, & 33-34, Yamakawa discloses (Figure 2, item 209) input (with a pre-gamma-correction actual gamma) CMYK image data that is converted to output (with a post-gamma-correction idealized gamma) CMYK image data via a deterministic calculation.

4. Claims 3-4, 12-13, 24, 28, & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike or Yamakawa as applied to claims 1, 10, & 19 above, and further in view of Applicant's admitted Prior Art.

Re claims 3-4, & 12-13, Koike or Yamakawa does not describe the scanning of a test image to calculate the gamma characteristic information of an output device. The use of such test scanning is well known to one of ordinary skill in the art as indicated for example by Applicant's description of JA 8-69210A (page 1, lines 10-24). The use of such a test scanning to provide the gamma characteristic data used in Koike or Yamakawa in order to compensate for variations caused by temperature, humidity, etc. (as noted by Applicant at page 1, lines 10-16) would be an expedient obvious to one of ordinary skill in the art.

Art Unit: 2624

Examiner notes that Applicant's arguments pertaining to these claims (Paper #12: page 19, line 12 - page 20, line 2) reference the previously addressed arguments pertaining to parent claims 1, 10, & 19 without raising issues concerning the additional recitations of these claims.

5. Claims 24, 28, & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamakawa as applied to claims 1, 10, & 19 above, and further in view of Applicant's admitted Prior Art.

Re claims 24, 28, & 32, Yamakawa does not disclose that corrected errors in gamma characteristic arise from atmospheric conditions or aging. The fact that gamma characteristic errors may result from these factors is well known as described by Applicant (page 1, lines 10-11). The use of such a test scanning to provide the gamma characteristic data used in Yamakawa in order to compensate for variations caused by temperature, humidity, etc. (as noted by Applicant at page 1, lines 10-16) would be an expedient obvious to one of ordinary skill in the art.

Examiner notes that Applicant's arguments pertaining to these claims (Paper #12: page 19, line 12 - page 20, line 2) reference the previously addressed arguments pertaining to parent claims 1, 10, & 19 without raising issues concerning the additional recitations of these claims.

Art Unit: 2624

Allowable Subject Matter

6. Claims 35-43 are allowed.

7. Claims 2, 5-6, 11, 14-15, & 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 2, 11, 20, & 35, 38, & 41 (and dependent claims 21-22 & 42-43), the art of record does not teach or suggest the recited variation between the number of tone levels in input and output tone level data in conjunction with the recited gamma correction arrangement.

Re claims 5, 14, 36, & 39, the art of record does not teach or suggest the recited variation between the bit number assigned to a pixel in a test printing operation and a usual printing operation in conjunction with the recited gamma correction arrangement.

Re claims 6, 15, 37, & 40, the art of record does not teach or suggest the recited variation between the screen frequency assigned to a test printing operation and a usual printing operation in conjunction with the recited gamma correction arrangement.

Response to Arguments

9. Applicant's arguments, see Paper #12, filed 20 October 2003, with respect to the rejection(s) of claim(s) 1, 10, & 19 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Koike or Yamakawa in view of Kuwata et al. or Satou et al.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2624

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 703-305-4390. The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2600 Customer Service center at 703-306-0377.

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 703-308-7452.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 703-872-9306.

Stephen M Brinich
Examiner
Art Unit 2624

smb *smb*
January 8, 2004



THOMAS D.
~~LEE~~ LEE
PRIMARY EXAMINER